

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
SAN FRANCISCO BAY REGION

ORDER NO. 89-009

ISSUING WASTE DISCHARGE REQUIREMENTS FOR:

U.S. ARMY CORPS OF ENGINEERS, SAN FRANCISCO DISTRICT  
MARE ISLAND STRAIT MAINTENANCE DREDGING  
SOLANO COUNTY

The California Regional Water Quality Control Board, San Francisco Bay Region (the Board), finds that:

1. The U.S. Army Corps of Engineers, San Francisco District (hereinafter the discharger) has proposed to dredge 300,000 - 1,000,000 cubic yards of material from Mare Island Strait. The proposed activity is the maintenance dredging of Mare Island Strait for fiscal year 1989. The project purpose is to ensure the continued navigability of the Federally authorized channel. The discharger by application dated December 19, 1988 has applied for issuance of Waste Discharge Requirements for the proposed maintenance dredging.
2. The discharger's dredging proposal will remove accumulated sediments in the Mare Island Strait. The project includes: (1) maintenance dredging the existing Federal channel of an estimated of 300,000-1,000,000 cubic yards of fine grained sediment (primarily silt and clay) by hydraulic (e.g. self-propelled hopper; hydraulic cutterhead) or mechanical (e.g. clamshell) dredge to a depth of -37 feet MLLW including a one foot allowable overdepth; and (2) disposal of the material by either self-propelled hopper or dump scow at the EPA/COE designated Carquines Strait aquatic disposal site (SF-9).
3. The project is scheduled for approximately 60 days beginning March 23, 1989 to May 23, 1989.
4. The discharger as a lead agency has determined that the proposed project and its impacts are similar to those considered in the Final Composite Environmental Statement on Maintenance Dredging, Existing Navigation Projects, San Francisco Bay Region, California, December 1975. Therefore, no further environmental documentation is required to comply with NEPA for the 1988 maintenance dredging. In addition, the proposed maintenance dredging is exempt from CEQA pursuant to Section 15304(g) of the Resource Agency Guidelines because the material is to be deposited at a site formally approved by EPA and Corps of Engineers.
5. The Board adopted a revised Water Quality Control Plan for the San Francisco Bay Region (the Basin Plan) on December 17, 1986. The Basin Plan contains water quality objectives for San Francisco Bay.
6. The beneficial uses of San Francisco Bay in the vicinity of the dredging and disposal area are:
  - a. Water contact and non-contact water recreation

- b. Industrial process and service supply
  - c. Commercial and sport fishing
  - d. Wildlife habitat
  - e. Preservation of rare and endangered species
  - f. Fish migration and spawning
  - g. Shellfish harvesting
  - h. Estuarine habitat
  - i. Navigation
7. The discharger has conducted physical and chemical characterization of the sediment and a particulate phase toxicity test. Samples were taken in October 1988 within Mare Island Strait and the Carquinez Strait aquatic disposal site. All analyses were performed according to EPA/COE approved protocols for sediment analysis. After taking into consideration a mixing zone at the disposal site, as established in the Clean Water Act, it is determined that the proposed project would not violate the water quality objectives contained in the Basin Plan.
8. The discharger and interested persons have been notified of the Board's intent to issue requirements for the discharge and have been provided with the opportunity to submit their written comments.
9. The Board, in a properly noticed public hearing on January 18, 1989, heard and considered all comments pertaining to the discharge.

IT IS HEREBY ORDERED, pursuant to the provisions of Division 7 of the California Water Code and regulations adopted thereunder and to the provisions of the Federal Water Pollution Control Act, as amended, and regulations and guidelines adopted thereunder, that the discharger shall comply with the following:

A. Receiving Water Limitations

1. The dredging and disposal activities shall not create a nuisance as defined in Section 13050(m) of the California Water Code.
2. The discharge of waste shall not cause the following conditions to exist in waters of the State at any place:
  - a. Floating, suspended, or deposited macroscopic particulated matter or foam;
  - b. Aquatic growths;
  - c. Significant alteration of temperature, turbidity, or apparent color beyond present natural background levels;
  - d. Visible, floating, suspended, or deposited oil or other products of petroleum origin;
  - e. Toxic or other deleterious substances to be present in concentrations or quantities which will cause deleterious effects on aquatic biota, wildlife, or waterfowl, or which render any of these unfit for human consumption either at levels created in the

receiving waters or as a result of biological concentration.

3. The discharge of waste shall not cause the following limits to be exceeded in waters of the State in any place within one foot of the water surface:

- a. Dissolved oxygen      5.0 mg/l minimum. Median of any three consecutive months shall not be less than 80% saturation. When natural factors cause lesser concentration(s) than those specified above, then this discharge shall not cause further reduction in the concentration of dissolved oxygen.
- b. Dissolved sulfide      0.1 mg/l maximum
- c. pH      Variation from natural ambient pH by more than 0.5 pH units.
- d. Un-ionized ammonia      0.025 mg/l as N Annual Median  
0.16 mg/l as N Maximum
- e. The turbidity of the waters of the State at any point beyond 200 feet outside of the Carquinez disposal area shall not increase above background levels by more than the following:

<u>Receiving Water Background</u>	<u>Incremental Increase</u>
< 50 units	5 units, maximum
50 - 100 units	10 units, maximum
> 100 units	10% of background, maximum

4. The discharger shall not cause a violation of all applicable water quality standards for receiving waters adopted by the Board and the State Water Resources Control Board as required by the Clean Water Act and regulations adopted thereunder. If more stringent applicable water quality standards are promulgated or approved pursuant to Section 303 of the Clean Water Act, or amendments thereto, the Board will revise and modify this Order in accordance with such more stringent standards.

#### B. Provisions

1. The discharge of dredged materials to the waters of the State shall cease immediately whenever violations of requirements are detected by the self-monitoring program as determined by the Executive Officer, and the discharge shall not resume until compliance can be assured to the Executive Officer's satisfaction.
2. The discharge of dredged materials to the waters of the State shall take place only at the EPA/COE aquatic disposal site (SF-9).
3. The discharger shall comply with all sections of this Order immediately upon commencement of dredged material disposal.

4. The discharger shall coordinate with the Department of Fish and Game so that dredging will not commence unless the potential biological damage of the dredging is minimized.
5. The discharger shall permit the Regional Board or its authorized representative in accordance with California Water Code Section 13267 (c):
  - a. Entry upon premises in which any required records are kept.
  - b. Access to copy any records required to be kept under terms and conditions of this order.
  - c. Inspection of monitoring equipment or records.
  - d. Sampling of any discharge.
6. The discharger shall comply with all applicable items of the attached "Standard Provisions, Reporting Requirements and Definitions" dated December, 1986.
7. This Order will expire upon completion of the dredging and disposal project and submittal of all required reports to the satisfaction of the Executive Officer.
8. The discharger shall comply with the self-monitoring program as adopted by this Board and as may be amended.

I, Steven R. Ritchie, Executive Officer, do hereby certify the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, San Francisco Bay Region, on January 18, 1989.



Steven R. Ritchie  
Executive Officer

Attachments:  
Standard Provisions & Reporting  
Requirements, December 1986  
Self-Monitoring Program

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
SAN FRANCISCO BAY REGION

SELF-MONITORING PROGRAM  
FOR

U.S. ARMY CORPS OF ENGINEERS  
MARE ISLAND STRAIT MAINTENANCE DREDGING  
ORDER NO. 89-009

## I. GENERAL

Reporting responsibilities of dischargers are specified in Sections 13325(a), 13267(b), 13268, 13383, and 13387(b) of the California Water Code and this Regional Board's Resolution No. 73-16.

The principal purposes of a monitoring program by a discharger, also referred to as a self-monitoring program, are:

1. To document compliance with waste discharge requirements and prohibitions established by this Regional Board.
2. To facilitate self-policing by the discharger in the prevention and abatement of pollution arising from waste discharge.

## II. DESCRIPTION OF SAMPLING AND OBSERVATION STATIONS

E-001      To be located 200 feet away from the periphery of the  
to          Carquinez Strait disposal area. E-001, E-002 and E-003 are  
E-003 to be equidistant from each other.

E-004      To be located at any point within the actively used portion of  
the Carquinez Strait disposal area, and 200 feet behind the  
disposal vessel.

## III. SCHEDULE FOR SAMPLING AND OBSERVATIONS

1. Grab samples are to be taken at all E stations at three times:  
before, during and after the dredging.
2. The samples are to be taken in the water column at three points:  
one foot below the surface, mid point and one foot from the bottom,  
and analyzed as follows:

dissolved oxygen (in mg/l)  
turbidity (NTU)  
sulfides (in mg/l, if the dissolved oxygen level is below 5 mg/l)  
un-ionized ammonia (mg/l)  
standard observations

Standard observations include:

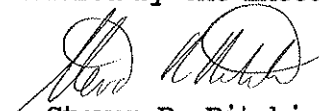
- a. Floating and suspended materials of waste origin, (to include oil, grease, and other macroscopic particulate matter), and the size of the affected area.
- b. Discoloration and turbidity: description of color, and size of the affected area.
- c. Odor: characterization and distance of travel.
- d. Height of tide, corrected to the nearest location for the sampling date and time of sample and collection.

#### IV. REPORTS TO BE FILED WITH THE BOARD

1. Report by telephone to the Regional Board five days ahead of the scheduled date of commencement of dredging operation.
2. In the event the discharger is unable to comply with the conditions of the waste discharge requirements and prohibitions, the discharger shall notify the Regional Board Office by telephone as soon as he or his agents have knowledge of the incident and confirm this notification in writing within two weeks of the telephone notification. The written report shall include pertinent information explaining reasons for the non-compliance and shall indicate what steps were taken to prevent the problem from recurring.
3. The discharger is to commence the monitoring program as soon as possible, and continue it throughout the project. Monthly report shall be filed within 15 days of the completion of the sampling and analysis of each month. Pre- and post dredge surveys are to be submitted upon completion of the proposed project.
4. The written report shall contain a statement by the discharger, under penalty of perjury, that to the best of the signer's knowledge the report is true and correct.

I, Steven R. Ritchie, Executive Officer, hereby certify that the foregoing Self-Monitoring Program:

1. Has been developed in accordance with the procedures set forth in this Regional Board's Resolution No. 73-16 in order to obtain data and document compliance with waste discharge requirements established in Regional Board Order No. 89-009.
2. Is effective in the date shown below.
3. May be reviewed at any time subsequent to the effective date upon written notice from the Executive Officer or request from the discharger and revisions will be ordered by the Executive Officer.

  
Steven R. Ritchie  
Executive Officer

Effective Date 1/18/89